

Amendments to the Specification:

Amend the paragraph at page 19, lines 5-9 as follows:

Fig. 2A is a schematic illustration of a head of the IM nail of Fig. 1, and Fig. 2B is a cross-sectional illustration of the head through the line ~~A-A~~ 2B-2B of Fig. 2A, in accordance with an embodiment of the present invention;

Amend the paragraph at page 19, lines 13-16 as follows:

Figs. 4A and 4B are cross-sectional illustrations of a head with one of the holes of Fig. 2A through the line ~~B-B~~ 4A-4A of Fig. 2A, in accordance with embodiments of the present invention;

Amend the paragraph at page 19, lines 26-28 as follows:

Fig. 8 is a schematic illustration of an introducer applied to a femur, in accordance with an embodiment of the present invention; ~~and~~

Add the following new paragraph at page 19, after line 28, as follows:

Fig. 8(A) is an enlarged view of the circled portion in Fig. 8; and

Amend the paragraph at page 21, lines 16-23 as follows:

Fig. 2A is a schematic illustration of head 32 of IM nail 30, and Fig. 2B is a cross-sectional illustration of head 32 through the line ~~A-A~~ 2B-2B of Fig. 2A, in accordance with an embodiment of the present invention. Head 32 defines at least one hole 36, typically two holes, as shown in the figures. Holes 36 are typically oriented in an angled direction toward a femoral head 23 (Fig. 1) relative to a longitudinal axis of IM nail 30.

Amend the paragraph at page 22, line 16 to page 23  
line 19 as follows:

Figs. 4A and 4B are cross-sectional illustrations of one of holes 36 of head 32 through the line ~~B-B~~ 4A-4A of Fig. 2A, in accordance with an embodiment of the present invention. An inner grooved surface 70 of hole 36 is shaped to define a notch 72, which tab 52 engages when sleeve 50 is inserted into hole 36 and properly aligned, thereby locking sleeve 50 to hole 36. In the embodiment shown in Fig. 4A, the radius  $R_1$  of grooved inner surface 70 adjacent to notch 72 is less than the maximum radius  $R_2$  of inner surface 70 in a region further away from notch 72. To insert sleeve 50 into hole 36 and engage locking mechanism 51, the surgeon typically first rotationally orients the sleeve so that tab 52 is aligned with a region of hole 36 having maximum radius  $R_2$ , for example at the upper portion of hole 36. The surgeon then inserts the sleeve in the hole until tab 52 of sleeve 50 meets the upper portion of hole 36, which blocks further insertion of the sleeve. The surgeon then rotates the sleeve so that tab 52 approaches notch 72. As tab 52 approaches notch 72, tab 52 (and tongue 54) is

gradually depressed by inner surface 70, until the tab reaches the notch and the tongue springs back into its original position, forcing the tab into the notch, and locking it therein. Such a locking mechanism is generally impervious to loosening under cyclical loading, even over the course of many years. By contrast, two pieces which are attached without a locking mechanism (e.g., by being screwed together or wedged together) are susceptible to gradual loosening over time.

**Amend the paragraph at page 28, line 15 to page 29  
line 4 as follows:**

Reference is now made to ~~Fig. 8~~ Figs. 8 and 8A, which ~~is a~~  
are schematic illustration illustrations of an introducer 400  
applied to a femur 402, in accordance with an embodiment of the  
present invention. Introducer 400 is adapted to actively reduce  
and align a fracture 404 of femur 402, such as a subtrochanteric  
fracture, while generally minimizing the required size of an  
incision in the vicinity of the fracture. Introducer 400  
comprises a support 406, a coupling element 408, and a multi-  
axial control element, such as a biaxial control element 410.  
Coupling element 408 is adapted to couple introducer 400 to an IM  
nail 412, which is inserted into a medullary canal 414 of femur  
402. For example, coupling element 408 may comprise a male  
element adapted to be inserted into a hole defined by a proximal  
end of a proximal head 416 of IM nail 412. Other coupling  
mechanisms used by conventional introducers may also be used.

One or more neck screws 420 secure the IM nail at the head within a femoral head 422 of femur 402. Introducer 400 is typically shaped so as to define one or more holes (not shown) for guiding respective neck screws 420 during their insertion into femoral head 422.

Amend the paragraph at page 31, line 11 to page 32  
line 3 as follows:

In an embodiment of the present invention, biaxial control element 410 comprises a first member such as a first leg 448, and a second member such as a second leg 450, the first and second members comprising set screws 452 and ~~454~~ 468, respectively. The first and second legs each define one or more elliptical or otherwise elongated holes ~~456~~ 464 and 458, respectively. When inserted into elongated hole 426 of IM nail 412, pin 424 passes through one of holes ~~456~~ 464 and one of holes 458. The pin is initially positioned near respective distal ends of the holes. Tightening set screw 452 pushes the pin towards a proximal end of the one of the holes ~~456~~ 464, while tightening set screw ~~454~~ 468 pushes the pin towards a proximal end of the one of the holes 458. Therefore:

- tightening both set screws to the same extent and substantially simultaneously moves pin 424 in the cephalad direction towards support 406;
- tightening only set screw 452 rotates pin 424 clockwise, in order to align fragments 440 and 442; and
- tightening only set screw ~~454~~ 468 rotates pin 424

counterclockwise, in order to align fragments 440  
and 442, ~~and~~

Amend the paragraph at page 32, line 19 to page 33, line 14  
as follows:

In an embodiment, biaxial control element 410 comprises an optional shaped element, such as shaped element 454, coupled within biaxial control element 410 so as to provide means for pulling pin 424 (or otherwise inducing motion of pin 424) in the caudal direction. Shaped element 454 is coupled via a joint 456 to the proximal tip of set screw 452. (Alternatively or additionally, a shaped element is coupled to set screw ~~454~~ 452.) Pin 424 passes through a hole in shaped element 454, such that joint 456 allows set screw 452 to rotate while shaped element 454 substantially does not rotate. In addition, joint 456 couples shaped element 454 and set screw 452 such that movement of either one along the proximal/distal axis induces movement of the other one in the same direction. In particular, distal (caudal) motion of set screw 452 causes corresponding caudal motion of pin 424. (By contrast, in embodiments not having shaped element 454 or equivalents thereof, proximal motion of set screw 452 causes cephalad motion of pin ~~452~~ 424, while distal motion of set screw 452 does not induce any substantial motion of pin ~~452~~ 424.) It is noted that the configuration and shape of shaped element 454 shown in Fig. 8 is by way of illustration and not limitation. A person of ordinary skill in the art of mechanical design, having read the disclosure of the present patent application, would be able to develop other substantially equivalent means for providing cephalad and caudal motion of pin 424.

Amendments to the Drawings:

Please replace the original drawings with the new formal drawings submitted herewith, 7 sheets, Figs. 1-9B.

Attachment:     1.    7 Replacement Sheets for Figs. 1-9B  
                  2.    3 Annotated Sheets Showing Changes  
                          to original Figs. 2A, 4A, 4B and 8.